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By Michelle Chan
Michelle Chan

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No.	:	To Be Assigned	Confirmation No.:
Applicant	:	Theo T. Nikiforov	
Filed	:	Herewith	
TC/A.U.	:	1637	
Examiner	:	Jeffrey Siew	
Docket No.	:	100/07934	
Customer No.	:	021569	
Title	:	ASSAY METHODS AND SYSTEMS	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

The references cited on the attached form PTO-1449 are being called to the attention of the Examiner. This application is a continuation of U.S. Patent Application No. 10/057,812, filed January 24, 2002, which is a continuation of U.S. Patent Application No. 09/727,532, filed November 28, 2000 (now U.S. Pat. 6,436,646), which is a continuation of U.S. Patent Application No. 09/569,193, filed May 11, 2000 (now U.S. Pat. 6,472,141), which is a continuation-in-part of U.S. Patent Application No. 09/316,447, filed May 21, 1999 (now U.S. Pat. 6,287,774). All references cited in the attached form 1449 except AM, AY, BA, BB, BF, BN, BQ, BU, CB, CT, CU, CV, CZ, DA and DF have been previously cited in these applications. Copies of AM, AY, BA, BB, BF, BN, BQ, BU, CB, CT, CU, CV, CZ, DA and DF are enclosed

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herewith. Copies of the remaining documents are not being provided pursuant to 37 CFR §1.98(d). If copies of the references are not available to the Examiner, the Examiner is invited to contact the undersigned.

It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR §1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is made that a search has been conducted or that this statement encompasses all possible relevant information.

Applicants believe that no fee is required for submission of this statement, since it is being submitted within three months of the filing date or prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to charge such fee to Deposit Account No. 03-0177. Please charge any additional fees or credit any overpayment to the above-noted deposit account.

Respectfully submitted,



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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Complete if Known			
		Application Number			
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		First Named Inventor	Theo T. Nikiforov		
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Examiner Name	Jeffrey Siw				
Sheet		of		Attorney Docket Number	100/07934

U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No.	Document No.	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, lines, Where Relevant Passages or Relevant Figures Appeal
		Number - Kind Code (if known)			
	AA	US-5,143,854	09-01-1992	Pirrung et al.	
	AB	US-5,527,688	06-18-1996	Mallia	
	AC	US-5,587,285	12-26-1996	Cloyd et al.	
	AD	US-5,646,001	07-08-1997	Terstappen et al.	
	AE	US-5,665,865	09-09-1997	Lerner et al.	
	AF	US-5,688,648	11-18-1997	Mathies et al.	
	AG	US-5,707,804	01-13-1998	Mathies et al.	
	AH	US-5,728,528	03-17-1998	Mathies et al.	
	AI	US-5,744,305	04-28-1998	Fodor et al.	
	AJ	US-5,747,247	05-05-1998	Kowlaczowski et al.	
	AK	US-5,779,868	07-14-1998	Parce et al.	
	AL	US-5,783,687	07-21-1998	Glazer et al.	
	AM	US-5,804,395	09-08-1998	Schade et al.	
	AN	US-5,853,992	12-29-1998	Glazer et al.	
	AO	US-5,858,195	01-12-1999	Ramsey	
	AP	US-5,869,255	02-09-1999	Mathies et al.	
	AQ	US-5,885,470	03-23-1999	Parce et al.	
	AR	US-5,925,558	07-20-1999	Tsien et al.	
	AS	US-6,071,748	06-06-2000	Modlin et al.	
	AT	US-6,087,107	07-11-2000	Sheffield et al.	
	AU	US-6,100,039	08-08-2000	Burke et al.	
	AV	US-6,149,787	11-21-2000	Chow et al.	
	AW	US-6,153,073	11-28-2000	Dubrow et al.	
	AX	US-6,203,994	03-20-2001	Epps et al.	
	AY	US-6,287,774	09-11-2001	Nikiforov	
	AZ	US-6,326,142	12-04-2001	Royer	
	BA	US-6,436,646	08-20-2002	Nikiforov	
Examiner Signature			Date Considered		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	BB	US-6,472,141	10-29-2002	Nikiforov	
	BC	US-6,503,709	01-07-2003	Bekkaoui et al.	
	BD	US-09/321,309		Sundberg et al.	
	BE	US-2002/0061546	05-23-2002	Tsien et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Country Code - Number - Kind Code (if known)				
	BF	WO-94/12665		R-P Technologies		
	BG	WO-95/15981	06-15-1995	Univ. Utah		
	BH	WO-98/00231	01-08-1998	Caliper		
	BI	WO-98/00705	01-08-1998	Caliper		
	BJ	WO-98/18956	05-07-1998	Panvera		
	BK	WO-98/45481	10-15-1998	Caliper		
	BL	WO-99/16162	04-01-1999	Caliper		
	BM	WO-99/23466	05-14-1999	LJL Biosystems		
	BN	WO-99/64840	07-07-1999	Caliper		
	BO	WO-00/23785	04-27-2000	LJL Biosystems		
	BP	EP-0 781 853	07-02-1997	Eli Lilly Co.		
	BQ	EP-0 786 666	07-30-1997	Hoffman La Roche		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T
	BR	ANDERSSON, L. et al., "Isolation of Phosphoproteins by Immobilized Metal(Fe3+) Affinity Chromoatography," Anal Biochem. (1986) 154:250-254			
	BS	CHECOVICH, W.J. et al., "Fluorescence Polarization-a New Tool for Cell and Molecular Biology," Nature (1995) 75:254-256			
	BT	CHEN, W. et al., "Fluorescence Polarization in Homogeneous Nucleic Acid Analysis," Genome Res. (1999) 9:492-8			
	BU	COFFIN, J. et al., Anal. Biochem. (2000) 278:206-212			
	BV	DANDLIKER, B.B. et al., "Quantification of the Antigen-Antibody Reaction by the Polarization of Fluorescence," Biochem Biophys Res Commun. (1961) 5:299-304			
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BW	DANDLIKER, B.B. et al., "Fluorescence Polarization in Immunochemistry," Immunochemistry (1970) 7:799
BX	DANDLIKER, B.B. et al., "Fluorescence Polarization Immunoassay. Theory and Experimental Method," Immunochemistry (1973) 10:219
BY	DESHPANDE, S.S. et al., "A Robust, Versatile Tyrosine Kinase Assay for HTS in Drug Discovery," Prog. Biomed. Optics (SPIE) (1999) 3603:251-61
BZ	DEVLIN, R. et al., "Homogeneous Detection of Nucleic Acids by Transient-State Polarized Fluorescence," Clin. Chem. (1993) 39:1939
CA	EGHOLM, M. et al., <u>Nature</u> (1993) 365:566-568
CB	ERICKSON, A.C. et al., "Metal (Fe ³⁺) Affinity Chromatography: Differential Adsorption of Tau Phosphoproteins" <u>J. Neurosci. Methods</u> (1993) 46-245-249
CC	EVETT, J. et al., "DNA-Polylysine Interaction as Studied by Polarization of Fluorescence," Ann. N.Y. Acad. Sci. (1969) 158:210-22
CD	GIBSON, et al., "A Homogeneous Method for Genotyping with Fluorescence Polarization," Clinical Chemistry (1997) 43:1336-41
CE	GINGERAS, T.R. et al., "A Spectrofluorometric Method for Measurement of Restriction Endonuclease Activity Based on Fluorescence Polarization," J. Cell. Biochem. Suppl. (1992) Suppl. 17 Part C, p. 173
CF	GLOTOV, B.O. et al., "Histone H1-DNA Interaction: Influence of Phosphorylation on the Interaction of Histone H1 with Linear Fragmented DNA," Nucleic Acids Research (1977) 4:1065:82
CG	GREEN, R.C. "Fluorescence Polarization Colloid Charge Titration: Development and Application for Feed Forward Coagulant Control at Water Treatment Facilities," Ph.D. Thesis, University of Colorado (1997)
CH	ICHIMURA, S. et al., "The Interaction of 8-Anilino-1-Naphthalanesulfonate with Polylysine and Polyarginine," Biopolymers (1977) 16:1449-64
CI	JISKOOT, W. et al., "Preparation and Application of a Fluorescein-labeled Peptide for Determining the Affinity Constant of a Monoclonal Antibody-Hapten Complex by Fluorescence Polarization," Anal. Biochem. (1991) 196:421
CJ	JOLLEY, M.E. et al., "Fluorescence Polarization Immunoassay I. Monitoring Aminoglycoside Antibiotics in Serum and Plasma," Clinical Chemistry (1981) 27:1190-97
CK	JOLLEY, M.E. et al., "Fluorescence Polarization Assays for the Detection of Proteases and Their Inhibitors," Journal of Biomolecular Screening (1996) 1:33-38
CL	JORDEN, R.M. et al., "Colloid Charge Capacity-Its Measurement, Problems and Promise," Chemical Water and Wastewater Treatment IV (1997) 121-35

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	CM	KUMKE, M.U. et al., "Hybridization of Fluorescein-Labeled DNA Oligomers Detected by Fluorescence Anisotropy with Protein Binding Enhancement," Anal. Chem. (1995) 67:3945-51	
	CN	LAURENCE, D.J.R., "A Study of the Adsorption of Dyes on Bovine Serum Albumin by the Method of Polarization of Fluorescence," Biomechanical Journal (1952) 51:165-77 "	
	CO	LEVINE, L.M. et al., <u>Anal. Biochem.</u> (1997) 247:83-88	
	CP	LEVISON, S.A. et al., "Fluorescence Polarization Measurement of the Hormone-Binding Site Interaction," Endocrinology (1976) 99:1129	
	CQ	LUNDBLAD, J.R., et al., "Fluorescence Polarization Analysis of Protein-DNA and Protein-Protein Interactions," Molecular Endocrinology (1996) 10:607-612	
	CR	LYNCH, B.A. et al., "A Fluorescence Polarization Based Src-SH2 Binding Assay," Analytical Biochemistry (1997) 247:77-82	
	CS	MURAKAMI, A. et al., <u>Nucl. Acids Res.</u> (1991) 19:4097-4102	
	CT	MUSCZYNSKA, G. et al., "Selective Asorption of Phosphoproteins on Gel-Immobilized Ferric Chelate" <u>Biochemistry</u> (1986) 25-6850-6853	
	CU	NIKIFOROV, THEO T. et al., <u>Anal. Biochem.</u> (1999) 275:248-253	
	CV	PARK, Y-W. et al., <u>Anal. Biochem.</u> (1999) 269:94-104	
	CW	OWICKI, J.C. et al., "Application of Fluorescence Polarization Assays in High-Throughput Screening," Genetic Engineering News (1997)	
	CX	OZERS, M.S. et al., "Equilibrium Binding of Estrogen Receptor with DNA Using Fluorescence Anistropy," J. Biol. Chem. (1997) 272:30405-11	
	CY	SCHADE, S.Z. et al., "BODIPY-a-Casein, a pH-Independent Protein Substrate for Protease Assays Using Fluorescence Polarization," Analytical Biochemistry (1996) 243:1-7	
	CZ	SEETHALA, R. et al., <u>Anal. Biochem.</u> (1997) 253:210-218	
	DA	SEETHALA, R. et al., <u>Anal. Biochem.</u> (1998) 255:257-262	
	DB	SMALLSHAW, J.C. et al., "Determination of the Binding Constants for Three HPr-Specific Monoclonal Antibodies and Their Fab Fragments," Mol. Biol. (1998) 280:765-74	
	DC	TANHA, J. et al., "Thermodynamic Analysis of Monoclonal Antibody Binding to Duplex DNA," Nucleic Acids Research (1997) 25:1442-49	
	DD	TYAGI, S. et al., Nature Biotech, (1996), 14:303-308	
	DE	TYAGI, S. et al., Nature Biotech, (1998), 16:49-53	
	DF	URIOS, P. et al., <u>Anal. Biochem.</u> (1990) 185:308-312	

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	DG	WALKER, G.T. et al., "Strand Displacement Amplification (SDA) and Transient-State Fluorescence Polarization Detection of Mycobacterium Tuberculosis DNA," Clinical Chemistry (1996) 42:9-13	
	DH	WALKER, G.T. et al., Nucl. Acids Res. (1996), 24(2):34-353	
	DI	WEBER, G. "Rotational Brownian Motion and Polarization of the Fluorescence of Solutions," Adv. Protein Chem. (1953) 8:415	
	DJ	WEI, A. et al., "Use of Synthetic Peptides as Tracer Antigens in Fluorescence Polarization Immunoassays of High Molecular Weight Analytes," Anal. Chem. (1993) 65:3372	
	DK	WILKINSON, D. "Tyr'd and True: Immunochemical Reagents and Kits for Studying Tyrosine Phosphorylation," The Scientist (1999) pp. 13-21	
	DL	WU, P. et al., ""A High-Throughput STAT Binding Assay Using Fluorescence Polarization," Anal. Biochem. (1997) 249:29-36	
	DM	PanVera Corporation "Fluorescence Polarization Applications Guide", Madison, WI	
	DN	Molecular Devices Corporation's redacted version of its Opposition to Caliper's Motion for Preliminary Injection in pending litigation US Civil Case No. C-02-1837 (CRB) and supporting declaration by Andrew R. Barron and Richard Sportsman	
	DO	Claim Construction Order, US District Court, Northern District of California, Case No. C 02-01837, September 3, 2003	

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